

App Serial 10/064,902**PATENT****IBM Docket No. JP920010239US1****REMARKS**

In response to the office communication dated May 24, 2004, applicants respectfully provide the amendments specified above and the following remarks in support of remaining claims 1-14 and 18-21. It is believed that the remaining claims are allowable over the prior art of record, and early notification of allowance is respectfully requested.

Claims 1 - 21 were filed with this application. Pursuant to a telephone interview with the Examiner on April 5, 2004, a provisional election of claims 1-14, and 18-21 was made; which election is hereby confirmed. As such, claims 15-17 are withdrawn from consideration at this time.

The Official Action objects to claim 13 because lines 6 and 7 of the claim are not double-spaced. A corrected version of claim 13 is submitted herewith above.

The Official Action states that claims 1-7 and 18-21 stand rejected under 35 U.S.C. 103(a) as unpatentable over Patak et al. (U.S. Patent No. 5,743,381) in view of Yoshikawa et al. (U.S. Patent No. 6,036,326). According to the Official Action, Patak discloses a computer with a main body having at least one key and a display unit, all as required by claims 1 and 18. Patak does not disclose the remaining and essential elements of claims 1 and 18. The Official Action relies on Yoshikawa to provide the missing elements.

According to the Official Action, Yoshikawa teaches a "key top member... wherein a light accumulator recess is formed on the a (sic) top surface, the recess being indicative of an operative type of the key and a light accumulator being embedded in the light accumulator recess." The Applicants respectfully traverse this assertion. The Official

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Action references Figures 8A - 8D of the Yoshikawa specification along with the discussion appearing from column 9, line 32 to column 10, line 36 for support of this conclusion. In fact, the key top described and taught in Yoshikawa is significantly different from that appearing in the present application and does not include "a light accumulator embedded in a light accumulator recess" as required by claim 1 or the steps of "forming a light accumulator recess in a top surface" of a key and "depositing a light accumulating material in" the recess" as required by claim 18.

The referenced discussion in Yoshikawa describes the elements pictured in the referenced Figures. The key depicted there is significantly more complex than the one claimed by the present application. The Yoshikawa key includes a molded base (30), a layer of fluorescent material (38) molded to and completely covering the molded base (30) and a third molded layer (37) which is mounted on top of the fluorescent layer (38). The third layer (37) is described as "light transmittable" which apparently means at least partially translucent. The third layer (37) apparently has an opening cut in the shape of the key character. The fluorescent layer (38) includes upwardly projecting portions which extend up into or through the third layer so that the top surfaces (36) of these upwardly projecting portions are exposed through the third layer. It is these top surfaces (36) which provide the bright illumination on the key character. See column 9, lines 32-53 for this description.

In operation, ambient light passes through the at least partially translucent third layer (37) and enters the fluorescent layer. There the light is reflected internally and exits the small end surfaces (the upwardly projecting portions (36) more brightly than the surrounding area - relying on characteristics of fluorescent materials described starting at column 9, line 54. The construction of such a key is quite complex - requiring three layers of three different materials to be form-fitted together. The fluorescent layer must include the upwardly projecting portions to fit within the cut-out portion of the third layer.

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In contrast, claim 1 and claim 18 of the present invention requires only a standard, molded key top, made essentially like any other key top, adding only a recess formed in the shape of the key character. Into that recess, "a light accumulator" is embedded or deposited. In operation, the light accumulating material will absorb light energy when ambient light is available and plentiful. Then, when ambient light is scarce or completely unavailable, the light accumulating material will glow, illuminating the key top and the shape of the key character, allowing operation of the computer. The key of the Yoshikawa reference always requires some ambient light in order to work, since it is relying on flourescent properties ("so long as there is a little light in the ambinet environment, Col. 10, line 27).

To summarize: (i) Yoshikawa does not include a "light accumulator recess" as required by present claims 1 and 18 - instead, it includes an opening cut completely through the top layer to allow a layer of material provided under it to project upwardly into the cut out area, (ii) Yoshikawa does not include light accumulating material embedded or deposited into the light accumulator recess - instead, Yoshikawa includes a layer of flourescent material molded underneath the top layer of the key top and projecting upward into a cut out area, (iii) Yoshikawa uses flourescent material instead of light accumulating material, causing the Yoshikawa invention to require some ambient light in order to operate - while the present application uses light accumulating material which will glow even in complete darkness, (iv) Yoshikawa requires a complex molding and assembly process including three different layers of three different materials which must fit together precisely, making assembly more difficult and more expensive - while the keys of the present invention differ from 'normal' keys only in requiring a recess in the shape of the key character and a deposit of light accumulating material in the recess.

For the reasons given above, the Applicants respectfully traverse the stated rejection and feel that claims 1 and 18 are in condition for allowance. Also, claims 2-7 depend

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directly from claim 1 and include the elements thereof, rendering claims 2-8 similarly patentable in their present form. Claims 19 and 20 depend directly from claim 18 and include the elements of claim 18 as discussed above, therefore, claims 19 and 20 are also patentable over the cited prior art.

With respect to claim 6, the Official Action references Figs. 10A - 10C and col. 11, lines 24-53 of Yoshikawa to provide a "light accumulator recess surrounding the shape of the predetermined character." The discussion above with respect to Figures 8A-8D also apply here. The keys shown in Figs. 10A-10C and in the reference discussion do not include a light accumulator recess but the same three layer construction described above. Similarly, Fig. 11 and the discussion at col. 12, lines 7-21 of Yoshikawa does not disclose "a light accumulator recess that is formed to cover the top surface of a key except for an area of the predetermined character or symbol" as the Official Action states. Instead, the same three layer construction is used with a molded layer of translucent material sandwiched between a molded layer and a molded, translucent layer. None of these embodiments of Yoshikawa disclose or teach cutting a recess into (but not through - consistent with the definition of 'recess') a key top and depositing therein a light accumulating material. As such, the Applicants respectfully traverse the stated objections and request early notification of allowance of the remaining claims of the application.

The Applicants note with appreciation the finding that claim 8 would be allowable if rewritten in independent form including the limitations of its base claim and the finding that claims 9-14 are allowed as written.

For the reasons given and discussed above, the Applicants respectfully submit that the present application has been placed in condition for allowance and request early notification of the same.

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If the Examiner feels that an interview would help resolve any remaining issues, the courtesy of a telephone call is requested to the Applicants' attorney at the number given below.

Respectfully Submitted,



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